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February 11, 2004

Via ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Oral and Written Ex Parte Presentation in IB Docket No. 00-248

Dear Ms. Dortch:

On behalf of QUALCOMM Incorporated ("QUALCOMM"), this is to report that on February 10, 2004, Dean Brenner and Leonard Schiff of QUALCOMM, and Leslie Taylor, a consultant to QUALCOMM, participated in a meeting held at the Commission to resolve various issues in the above-referenced docket. Commission staff members in attendance were: Roderick Porter, Thomas Tycz, John Martin, William Howden, Steven Spaeth, Jackie Ponti, Frank Peace and Karl Kensinger.

At this meeting QUALCOMM reiterated its previous comments and proposals in the above docket concerning the need for a rule change in Section 25.138 of the Commission's rules to provide for fixed-satellite service systems employing random access techniques in the 20/30 GHz band. QUALCOMM also distributed to all the meeting participants a proposed rule change which is attached to this notice.

The main points made by QUALCOMM were:

- 1) a rule change is needed to accommodate random access systems in the 20/30 GHz band and this rule should be statistically based as the interference from multiple access systems is statistical;
- 2) this rule change would be technology neutral and would accommodate a variety of random access systems, including those which had not yet been developed;
- 3) the 20/30 GHz band is likely to be used for two-way broadband services and these types of services can best be provided by multiple access systems which can support higher data rates and many users;
- 4) QUALCOMM had previously analyzed interference from a multiple access system into the Spaceway system and found that the interference would be not cause unacceptable interference into Spaceway.

Attached is the draft rule change which was distributed by QUALCOMM at the meeting. The deletion of the identification of the frequency bands marks was added at the meeting as a result of input from other meeting participants.

I am filing this Notice in the ECFS system.

Sincerely yours,

/s/ Dean R. Brenner

Dean R. Brenner
Senior Director, Government Affairs
Attorney for QUALCOMM Incorporated

Attachment – Proposed revision to 47 CFR Part 25.138

Cc: : Roderick Porter, Thomas Tycz, John Martin, William Howden, Steven Spaeth, Jackie Ponti, Frank Peace and Karl Kensinger

IB Docket No. 00-248 – QUALCOMM’s Proposed Revision to Part 25 to Accommodate Broadband Systems Employing Random Access Technologies in the 20/30 GHz Band

Please Note: A proposed rule revision for the co-polarized case is provided. A proposed rule revision for the cross-polarized case will be submitted later.

§ 25.138 Blanket licensing provisions of GSO FSS Earth Stations in the 18.58–18.8 GHz (space-to-Earth), 19.7–20.2 GHz (space-to-Earth), 28.35–28.6 GHz (Earth-to-space) and 29.5–30.0 GHz (Earth-to-space) bands.

(a) All applications for a blanket earth station license in the GSO FSS in the 18.58–18.8 GHz, 19.7–20.2 GHz, 28.35–28.6 GHz and 29.5–30.0 GHz bands that meet the following requirements shall be routinely processed:

(1) GSO FSS earth station antenna off-axis EIRP spectral density for copolarized signals shall not exceed the following values, within $\pm 3^\circ$ of the GSO arc, under clear sky conditions:

$18.5-25\log(\square)-10\log(N)$	dBW/40kHz	for $2.0^\circ \leq \square \leq 7^\circ$
$-2.63-10\log(N)$	dBW/40kHz	for $7^\circ \leq \square \leq 9.23^\circ$
$21.5-25\log(\square)-10\log(N)$	dBW/40kHz	for $9.23^\circ \leq \square \leq 48^\circ$
$-10.5-10\log(N)$	dBW/40kHz	for $48^\circ < \square \leq 180^\circ$

Where:

\square is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems, N is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite;

N=1 for TDMA and FDMA systems.

(2) GSO FSS earth station antenna off-axis EIRP spectral density for copolarized signals shall not exceed the following values, for all directions other than within $\pm 3^\circ$ of the GSO arc, under clear sky conditions:

$21.5-25\log(\square)-10\log(N)$	dBW/40kHz	for $3.5^\circ = \square = 7^\circ$
$0.37-10\log(N)$	dBW/40kHz	for $7^\circ < \square = 9.23^\circ$
$24.5-25\log(\square)-10\log(N)$	dBW/40kHz	for $9.23^\circ < \square = 48^\circ$
$-7.5-10\log(N)$	dBW/40kHz	for $48^\circ < \square = 180^\circ$

Where:

\square is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems.

N: is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite; N=1 for TDMA and FDMA systems.

(3) The values given in paragraphs (a)(1) and (2) of this section may be exceeded by 3 dB, for values of $\square > 10^\circ$, provided that the total angular range over which this occurs does not exceed 20° when measured along both sides of the GSO arc.

(4) GSO FSS earth station antenna off-axis EIRP spectral density for cross-polarized signals shall not exceed the following values, in all directions relative to the GSO arc, under clear sky conditions:

$8.5 - 25 \log(\square - 10 \log(N))$	dBW/40kHz	for $2.0^\circ \leq \square \leq 7^\circ$
$12.63 - 10 \log(N)$	dBW/40kHz	for $\square \geq 9.23^\circ$

Where:

\square : is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems.

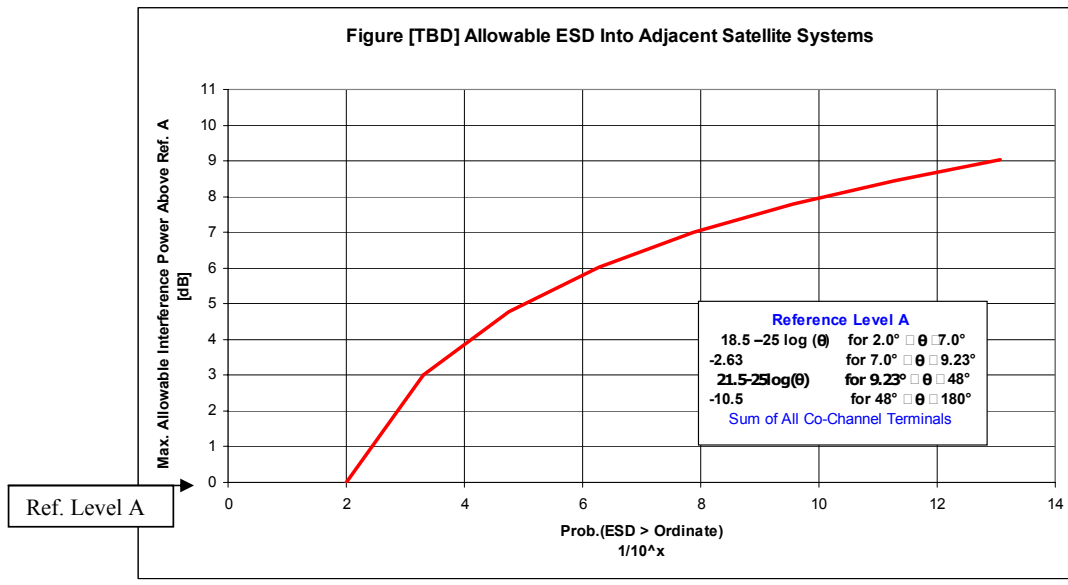
N: is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite; N=1 for TDMA and FDMA systems.

- (5) For earth stations employing uplink power control, the values in paragraphs (a) (1), (2), and (4) of this section may be exceeded by up to 20 dB under conditions of uplink fading due to precipitation. The amount of such increase in excess of the actual amount of monitored excess attenuation over clear sky propagation conditions shall not exceed 1.5 dB or 15 % of the actual amount of monitored excess attenuation in dB, whichever is larger, with a confidence level of 90 percent except over transient periods accounting for no more than 0.5% of the time during which the excess is no more than 4.0 dB.

(5) bis Earth stations employing random access techniques, will be considered to comply with (a)(1) above by certifying that:

Deleted: operating in the 28.35–28.6 GHz (Earth-to-space) and 29.5–30.0 GHz (Earth-to-space) bands

(a) the total number of simultaneously transmitting co-frequency GSO FSS earth stations operating in all beams of one satellite system generate an off-axis EIRP spectral density for co-polarized signals (when directing their power within $\pm 3^\circ$ of the GSO arc and under clear sky conditions) in accordance with the figure below.



[Note: the values on the X axis should be expressed as $10^2=0.01$, $10^4=0.0001$, etc.]

θ° from Terminal Antenna Boresight

θ° : is the average value of the angle, in degrees, measured from the axis of the main lobe of the earth station antennas in the direction of adjacent space stations.

(b) The maximum duration for which the total co-channel adjacent satellite EIRP spectral density shall not exceed 1.6 seconds for more than 1% of the events which exceed level A:

(c) The system will employ mechanisms for measuring the statistical emissions of earth stations generating interference into adjacent systems and for reducing the EIRP spectral density of such emissions when measurements indicate that any such system is operating in excess of the emission levels provided above.